

## SECTION VI

### CLEANING

***GMP 6.1 Fish cleaning shall be done in a sanitary area. All tables, pans, cleaning surfaces, etc. shall be of non-porous materials which are non-corrodible and easily cleaned and sanitized. No wooden surfaces are permitted. All surface joints shall be smooth and watertight.***

#### ***REASON***

To maintain sanitary conditions at all times, all fish cleaning shall be done in an area and on surfaces easily cleaned and sanitized.

***GMP 6.2 Workers shall have clean outer clothing and effective hair restraints to protect fish from foreign contamination. Employees who handle fish with their bare hands shall not wear fingernail polish.***

#### ***REASON***

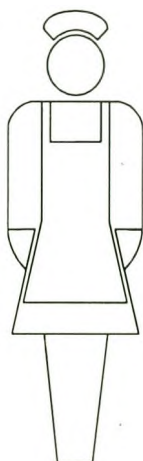
In order to prevent contamination of fish products, every person in food handling areas should maintain a high degree of personal cleanliness and should at all times wear suitable protective clothing including head covering and footwear, all of which should be cleanable unless designed to be disposed of, and should be maintained in a clean condition. Aprons and similar items should not be laid on the floor for washing. Personnel should not wear any insecure jewellery when engaged in food handling, and jewellery that cannot be adequately disinfected should be removed from the hands. Employees who handle fish with their bare hands shall not wear fingernail polish, because it may flake off and contaminate the product.



*Loin cleaning operation in which time and sanitation should be controlled*



*Personnel hygiene is vital*



*Workmanship is considered important to many markets*



**GMP 6.3** *No person who is known to be suffering from any communicable disease, is a known “carrier” of any disease or has an infected wound or open lesion on any part of the body shall be permitted to handle the fish.*

### **REASON**

Any person suffering from a communicable disease or who has an infected wound or open lesion or is a disease carrier has the potential to infect the food product with bacteria capable of causing food poisoning. The following guidelines are given in FAO/WHO Codex Alimentarius *Recommended International Code of Practice for Low-acid and Acidified Low Acid Canned Foods*:

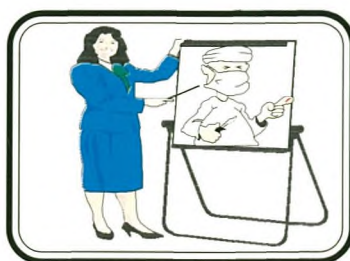
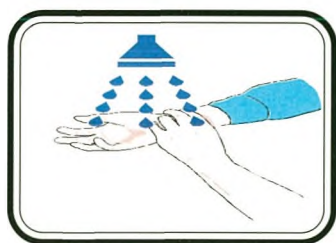
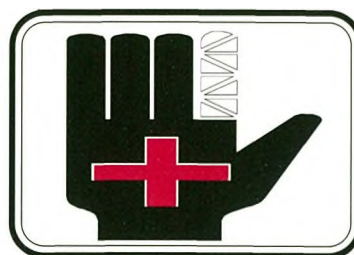
**Hygiene Training:** Managers of establishments should arrange for adequate and continuing training of every food handler in hygienic handling of food and in personal hygiene so that they understand the precautions necessary to prevent contamination of food. Instruction should include relevant parts of this code.

**Medical Examination:** Persons who come in contact with food in the course of their work should have a medical examination prior to their employment if the official agency having jurisdiction, acting on medical advice, considers that this is necessary, whether because of epidemiological considerations, the nature of the food prepared in a particular establishment or the medical history of the prospective food handler. Medical examination of a food handler should be carried out at other times when clinically or epidemiologically indicated.

**Communicable Diseases:** The management should take care to ensure that no person, while known or suspected to be suffering from, or to be a carrier of, a disease likely to be transmitted through food or while afflicted with infected wounds, skin infections, sores or diarrhoea, is permitted to work in any food handling area in any capacity in which there is any likelihood of such a person directly or indirectly contaminating food with pathogenic microorganisms. Any person so affected should immediately report to the management that he is ill.

**Injuries:** Any person who has a cut or wound should not continue to handle food or food contact surfaces until the injury is completely protected by a waterproof covering which is firmly secured, and which is conspicuous in colour. Adequate first-aid facilities should be provided for this purpose.

**Washing of Hands:** Every person engaged in a food handling area, while on duty, should wash his hands after each absence from duty with a suitable hand cleaning preparation under running warm, potable water. Hands should always be washed before commencing work, immediately after using the toilet, after handling contaminated material and whenever else necessary. Notices requiring hand-washing should be prominently displayed. There should be adequate supervision to ensure compliance with this requirement.





***GMP 6.4 Off-colour loins (discoloured flesh, either green, orange or red), off-odour fish and fish exhibiting “honeycomb” material detected during cleaning or during loin inspection shall be removed from the tuna pack.***

***REASON***

This is a critical processing step. Off-colour, off-odour and honeycombed flesh are indicative of quality deterioration and such flesh must be removed, since its inclusion in the final pack would render the final product unacceptable.



*Defective loin meat*

***GMP 6.5 Care shall be taken to ensure that cleaned edible product is not contaminated with offal.***

***REASON***

Offal is defined as non-edible parts of the tuna, including viscera, scales, eyes, gills, skin, bones, blood meat and other material not characteristic of the pack, and any rancid or decomposed flesh which would render the product unacceptable.

***GMP 6.6 There shall be a complete washdown and cleaning of processing surfaces and the cleaning tables shall be sanitized at the end of each work shift. Containers used to transport finished material shall be washed after each use. The table shall be rinsed down at least once during a 4-hour period.***

***REASON***

Unless there is a complete washdown and sanitizing of processing surfaces, cleaning tables, and containers used to transport the cleaned flesh, there will be an accumulation of pieces of fish and an increase in bacterial growth, thereby contaminating the product coming in contact with these surfaces.

*Table should be washed down every 4 hours, and trays washed at every use*





***GMP 6.7 Cleaned fish loins and flesh shall be stored for as short a period as possible, and not for more than one hour before the material is packed in a can.***

NOTE: The storage of cleaned fish shall be deemed to start from the time cleaned product is placed on conveyors or in trays until the product is packed in a can.

***REASON***

In order to prevent the growth of spoilage bacteria, cleaned loins, chunks and flakes shall be stored for as short a period as possible, and definitely not more than one hour before being packed.

*Cleaned loins should be packed within 1 hour*



**< 1 hour**